

Jack Liu

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LANGUAGES AND TECHNOLOGIES

- Languages: **C++, Java, C, Python, JavaScript, HTML/CSS, SQL**
- Technologies: **Git, AWS, Bash, Unix, NodeJS, TensorFlow, Docker, Jenkins, Phabricator, MySQL**

EXPERIENCE

Software Engineering Intern | JamLabs Data Science

Sep 2022 – Dec 2022

- Conserved over half of file retrieval costs by allowing users to query CSV and Parquet data through API calls to only select their required rows of data with using ExpressJS and AWS Athena queries
- Established customer email verifications using AWS Simple Email Service to send email-validating links containing Scrypt security tokens to all newly registered accounts
- Implemented a trial account functionality with an ExpressJS backend and a ReactJS frontend to demonstrate our product to new customers
- Provided company admins with overarching functions to manage all sub-accounts in one place with AWS Lambdas

Software Engineering Intern | Axonify

Jan 2022 – Apr 2022

- Enhanced product accessibility and user engagement by adding an automatic translation system to Axonify's timeline with Java and Google Cloud Translation API for non-English speakers
- Automatically identified languages with the Cloud Translation API to configure default preferred languages for all users and translated accordingly
- Implemented a cache system for frequent translations with Java to improve product efficiency and cost and created options to edit cache settings or clear cache
- Revamped the error messaging system to accurately describe problems for customers on the browser application

Server Developer Intern | Axonify

May 2021 – Aug 2021

- Effectively conserved cloud storage space by implementing an automatic file purging process to delete infrequently accessed or outdated upload files using Java's JDBC library and SQL
- Streamlined purging legacy code and updating Java Mockito unit tests with Python scripts across the code base
- Improved platform and customer security by enforcing a minimum password strength based on customer permissions with Python

PROJECTS

Crypto and Stock Price Tracker

Sep 2022 – Nov 2022

- Fetched current cryptocurrency and stock prices with a web scraper in NodeJS and Cheerio to store and update in JSON format
- Displayed real-time prices on a ReactJS app with links to purchase said cryptocurrencies and stocks

Personal Website

Aug 2022 – Sep 2022

- Created a JavaScript website with ReactJS and hosted it on Netlify to present my personal projects, resume, and portfolio

Automated Bots for Discord and Twitter

Apr 2020 – Sep 2020

- Developed bots for Discord and Twitter with Python to integrate YouTube Music, track statistics, and respond to users mentions
- Maximized availability of the bots by hosting them on Heroku

Competitive Programming

Mar 2020 – Present

- Competed in Codeforces, AtCoder, Google Kickstart and LeetCode programming competitions
- Improved quality of life for contestants by building templates for various contests on GitHub with C++

EDUCATION

Bachelor of Software Engineering | University of Waterloo

Sep 2020 – Present